





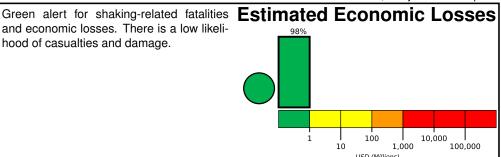
# **PAGER** Version 5

Created: 3 weeks, 5 days after earthquake

# **M 5.8, 7 km SE of Esmeraldas, Ecuador** Origin Time: 2022-03-27 04:28:12 UTC (Sat 23:28:12 local) Location: 0.9032° N 79.6117° W Depth: 19.0 km

**Estimated Fatalities** 10,000 1,000

and economic losses. There is a low likelihood of casualties and damage.



# **Estimated Population Exposed to Earthquake Shaking**

ESTIMATED POPULATION EXPOSURE (k=x1000)		_*	4,917k*	935k	83k	242k	2k	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY			II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVE	SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

# Population Exposure

population per 1 sq. km from Landscan

# 80.4°W 79.2°W La Tola 11) 11 Payan Tumaco 1.2°N Rosa Zarate 0.1°N Pedernales Machachi

### PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

#### **Structures**

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

### **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1990-08-11	173	5.3	VII(390k)	4
1976-04-09	7	6.6	VII(131k)	8
1987-03-06	222	7.1	IX(2k)	1k

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

### Selected City Exposure

from Ge	eoNames.org	
MMI	City	Population
VI	Esmeraldas	165k
٧	Cube	<1k
IV	Muisne	13k
IV	Rosa Zarate	42k
IV	Valdez	11k
IV	San Lorenzo de Esmeraldas	20k
IV	Santo Domingo de los Col-	200k
	orados	
Ш	Tumaco	87k
Ш	Ibarra	133k
Ш	Tutamandahostel	140k
Ш	Quito	1,400k

bold cities appear on map.

(k = x1000)